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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,323	07/07/2003	Michael Dieter Kollmann	CA920030064US1	9355

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EXAMINER	
ROMANO, JOHN J	
ART UNIT	**PAPER NUMBER**
2192	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/615,323	KOLLMANN ET AL.	
	Examiner	Art Unit	
	John J. Romano	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *26-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *26-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's amendment and response received June 7th, 2007, responding to the April 10th, 2007, Office action provided in the rejections of claims 1, 3, 4, 7-9, 11-13, 16-18, 20, 21, 24 and 25, wherein claims 1- 25 are now cancelled and new claims 26-44 are added. Accordingly, claims 26-44 are pending in the application and which have been fully considered by the examiner.

Prior Art's Arguments – Rejections

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection as addressed below.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims **26-44** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to independent claims 26 and 36, it is unclear what the limitation "...resizing the trace history buffer if it is determined the trace history buffer is in need of resizing." The term "in need of resizing" is not defined by the claim, the specification

does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example, it is unclear what the "need of resizing" (Claim 26, lines 20-23) encompasses and the resulting action of "resizing" the buffer is intended to mean. The subsequent instances are interpreted to mean configuring the trace history buffer to a specified size. Appropriate correction is required.

Accordingly, dependent claims **27-35** and **37-44** are rejected for not further defining the subject matter to overcome the deficiencies of the independent claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims **26-44** are rejected under 35 U.S.C. 103(a) as being unpatentable over Marick, ""The Trace.Java User's Guide" (new art of record and hereinafter **Marick**) in view of Chen et al., US 5,642,478 (hereinafter **Chen**).

In regard to claim **26**, **Marick** discloses:

- "*A method of automatically adjusting a level of trace data collection, comprising: monitoring program activity occuring during execution of a computer program; collecting trace data representative of the program*

activity..." (E.g., see page 10 of 27), wherein logging is program controlled to dump the trace record at when level and then automatically adjust the collection by dumping the history buffer (transient buffer) at a second predetermined level.

- "*...writing the trace data to one or more trace records, each of the one or more trace records including a trace level associated therewith, the trace level indicating a severity of the program activity...*" (E.g., see page 4-6,) wherein trace records are collected with severity level.
- "*...storing the one or more trace records in a trace history buffer located in volatile memory, such that trace records are written to the trace history buffer until the trace history buffer is full, and older trace records are overwritten by newer trace records when the trace history buffer is full, the trace history buffer thereby containing a history of recent trace records...*" (E.g., see page 7 of 27,) wherein the transient buffer (trace history buffer) records the most recent messages according to the level set. Note, see set property, page 10.
- "*...comparing, for each trace record stored in the trace history buffer, the trace level to a predetermined threshold value, and writing the trace record to a log file located in persistent storage as a logged trace record if the trace level is greater than the predetermined threshold value...*" (E.g., see page 10 of 27,) wherein the threshold for level of trace records is set to determine what trace record level results in

logging the trace record. See "setProperty ("TraceLog_default", "level")".

- "*...writing the trace history buffer to the log file if a trap value specific to the program activity is detected within the logged trace record...*" (E.g., see page 13 of 27), wherein an exception handler catches an exception (value specific to program activity) and dumps the history buffer.
- "*...writing the trace history buffer to the log file if the trap value specific to the program activity fails to be detected, and if the trace level associated with the logged trace record is greater than a predetermined trace history level...*" (E.g., see page 10 of 27,) wherein the threshold for level of trace records is set to determine what trace buffer/ transient buffer (trace history buffer) level results in logging the buffer. See "setProperty ("TraceBuffer_default", "level")".

But **Marick** does not expressly disclose "*...upon writing the trace history buffer to the log file, resizing the trace history buffer if is determined the trace history buffer is in need of resizing; and resetting and clearing the trace history buffer such that storing of trace records may continue.*". However, **Chen** discloses:

- "*...resizing the trace history buffer if is determined the trace history buffer is in need of resizing...*" (E.g., see Column 4, lines 1-16), wherein a variable length circular buffer containing trace detail is disclosed.

Marick and Chen, are analogous art because they are both concerned with the same field of endeavor, namely, logging trace data in a distributed system. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine **Chen's** circular buffer with **Marick'** tracing method. The suggestion to combine was disclosed by **Chen's** disclosure of ensuring efficient storage of particular data (E.g., see Column 4, lines 8-16).

Similarly, it would have been known to one of ordinary skill in the art, in view of the same teachings of **Chen and Marick**, at the time of the invention, that "...*upon writing the trace history buffer to the log file, resizing the trace history buffer if is determined the trace history buffer is in need of resizing; and resetting and clearing the trace history buffer such that storing of trace records may continue.*".

In regard to claim **27**, the rejections of base claim **26** are incorporated. But, **Marick** does not expressly disclose "...*the trace level is a numeric value.*" However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to implement the separate levels with a numeric value. The motivation to do so was provided by **Marick's** teaching of program control (page 1 + 10), thereby necessarily coding the different levels of the program in a digital system represented by numeric values (either directly or indirectly). Therefore, it would have been obvious to one of ordinary skill in the art to implement different components remotely over a network.

In regard to claims **28-31** (E.g., see page 10 of 27,) wherein **Marick** discloses the threshold for level of trace records is set to determine what trace buffer/ transient buffer

(trace history buffer) level results in logging the buffer. See "setProperty ("TraceBuffer_default", "level")".

In regard to claim **32**, the rejections of base claim **26** are incorporated. Furthermore, **Marick** discloses:

- "*...the trap value comprises a condition code unique to an event occurring within the program.*" (E.g., see page 13 of 27). Additionally, it is old and well known in the art of computer programming, to implement an exception handler to catch an exception (condition code), wherein an exception is old and well known to be implemented by a program controlled condition that triggers a hardware interrupt signal.

In regard to claim **33**, the rejections of base claim **26** are incorporated. Furthermore, **Marick** discloses:

- "*...the trap value comprises a trigger received from a hardware signal.*" (E.g., see page 13 of 27). Additionally, it is old and well known in the art of computer programming, to implement an exception handler to catch an exception (condition code), wherein an exception is old and well known to be implemented by a program controlled condition that triggers a hardware interrupt signal.

In regard to claim **34**, see claim **1**.

In regard to claim **35**, the rejections of base claim **26** are incorporated. But, **Marick** does not expressly disclose "*...the log file and the trace history buffer reside on*

different computer systems that communicate over a network." However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to implement the separate components on separate or remote machines. The motivation to do so was provided by **Marick's** teaching of remote customer support and the Java distributed system (page 1 + 10), where the remote subsystems are disclosed. Therefore, it would have been obvious to one of ordinary skill in the art to implement different components remotely over a network.

In regard to claims **36-44**, this is a computer program product version of the claimed method discussed above, in claims **26-34,** wherein all claimed limitations have also been addressed and/or cited as set forth above. See **Marick** (page 12, "program control").

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Romano whose telephone number is (571) 272-3872. The examiner can normally be reached on 8-5:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TUAN DAM
SUPERVISORY PATENT EXAMINER